

FOREWORD

New style wiring harness is designed upon *chery sedan wiring harness-updating plan* approved by Chery Auto Co., LTD in July 2001. According to updated plan, concentrated control in central electrical box is replaced with a nearby control method in design, enhancing circuit performance, avoiding internal resistance and heat sources interference between electrical devices and increasing the whole vehicle wiring harness reliability and endurance.

During updating, some structures and features on home and abroad famous brand name vehicles are used for reference or equivalently taken as follows:

1. Adding whole vehicle electrical devices problem automatic safety-protect unit, which ensure whole circuit system being cut off when sudden accident occurs to avoid possible fire hazard or other injury from short problem.

2. Selecting a new central electrical box mainly used for whole vehicle control circuit, in which there are 6 built-in mini relays, 24 type fuses, 3 intensive safety protect units and 58 external connecting points.

3. High current and power electrical devices are nearby controlled, such as fan and A/C control circuit are directly completed at front compartment harness, shortening the current path.

Comparing with old wiring harness, main changes in wiring harness and electrical devices are as follows:

Interior harness, front compartment harness, I/P (instrument panel) harness, battery positive harness, central electrical box, two front and rear fog light switches instead of one switch on old vehicle, and also relevant changes in ABS harness connector.

But control theory and whole vehicle harness routing mainly keep unchanged.

Only whole vehicle electrical devices theory illustrations are available in this manual and there exists difference with actual electrical devices circuit. For convenience of compiling and printing, some big circuits page are divided into several small pages, which will take inconveniences when reading and therefore will require the user have a good command of circuits on SQR710 sedan.

For compilers' knowledge and time limits as well as rapid technology updating, some errors and oversights are hard to avoid and kindly appreciate for users' pointing out with the idea of improving together. Electrical system are rapidly updated, therefore some new circuit are not compiled on this manual on the time of publishing and will be supplemented timely.

This manual is compiled by Chang Yongjiu, Yao Shen and reference books are supplied by product department.

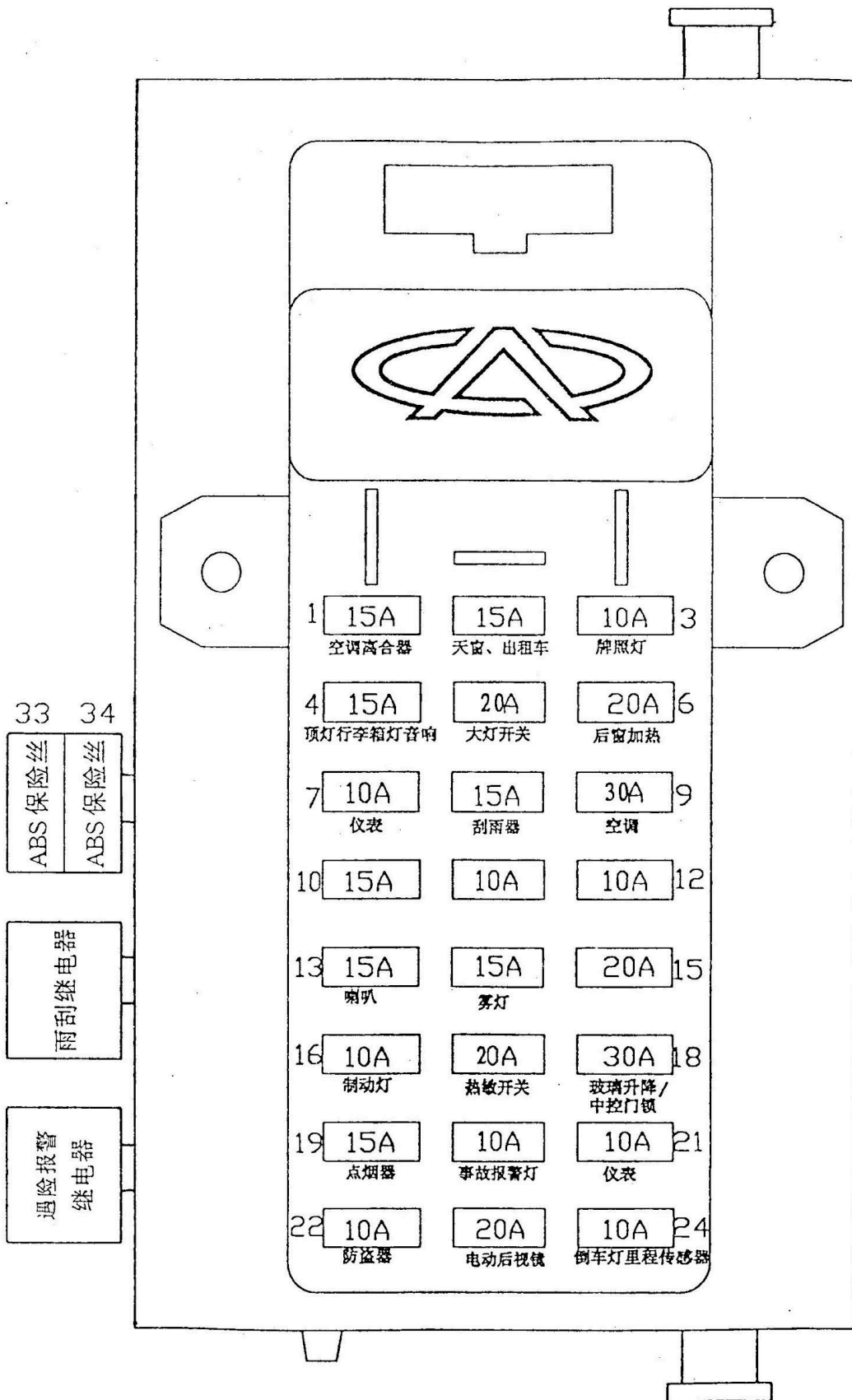
Written by compilers

November 2002

TOTAL CONTENT

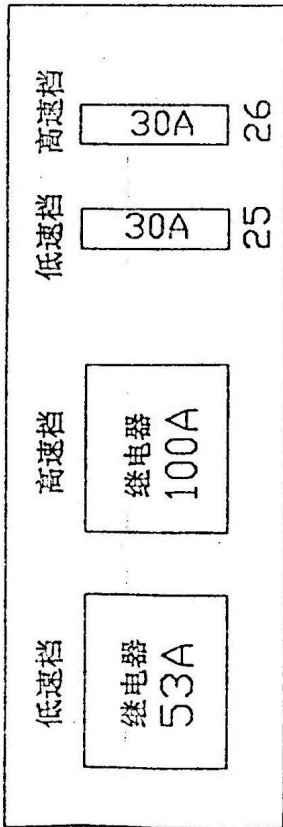
- No.1 Central Electrical Box Fuse And Relay Position (2 Pages)
- No.2 Central Electrical Box Connector Position And Function (3 Pages)
- No.3 Circuit Manual Explanation (2 Pages)
- No.4 Circuit (23 Pages)
- No.5 ET Vehicle Circuit (25 Pages)

中央电器盒继电器位置图(室内方向盘下)



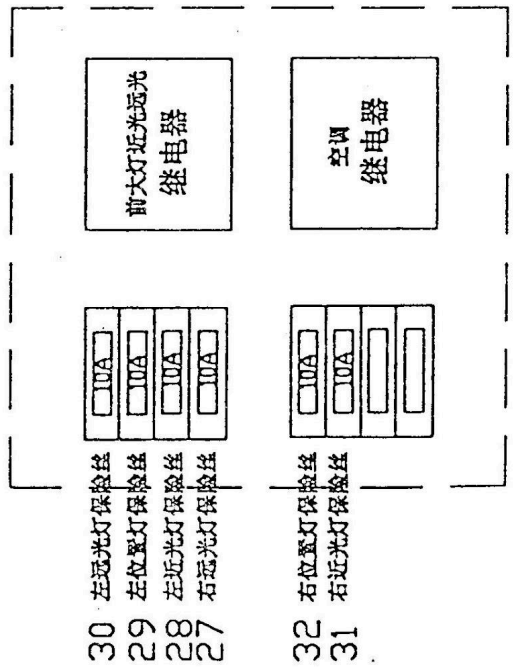
继电器、保险丝位置图

散热器风扇控制 (一) 清洗液罐旁



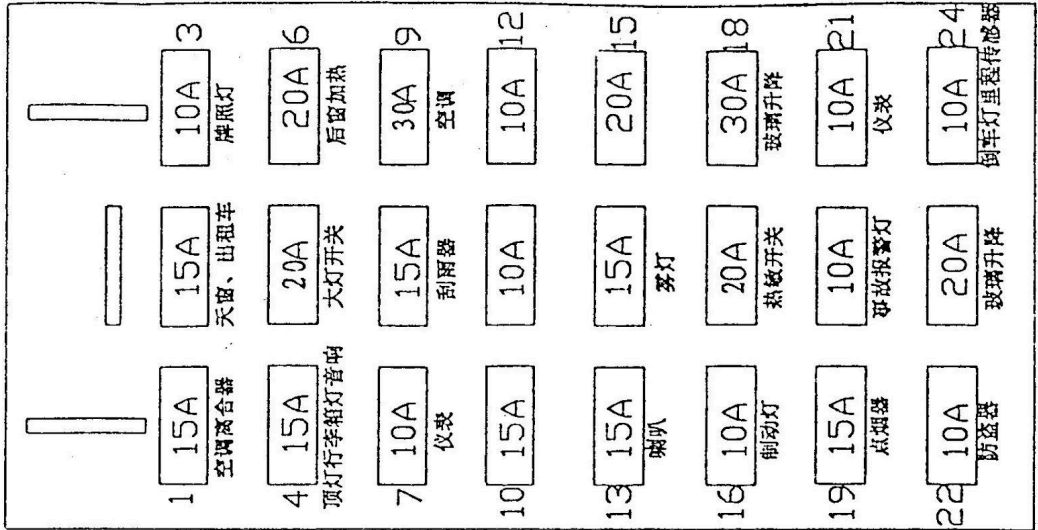
注: 双风扇时高速用 50A 保险丝

继电器盒保险丝位置 (二) 前舱右边

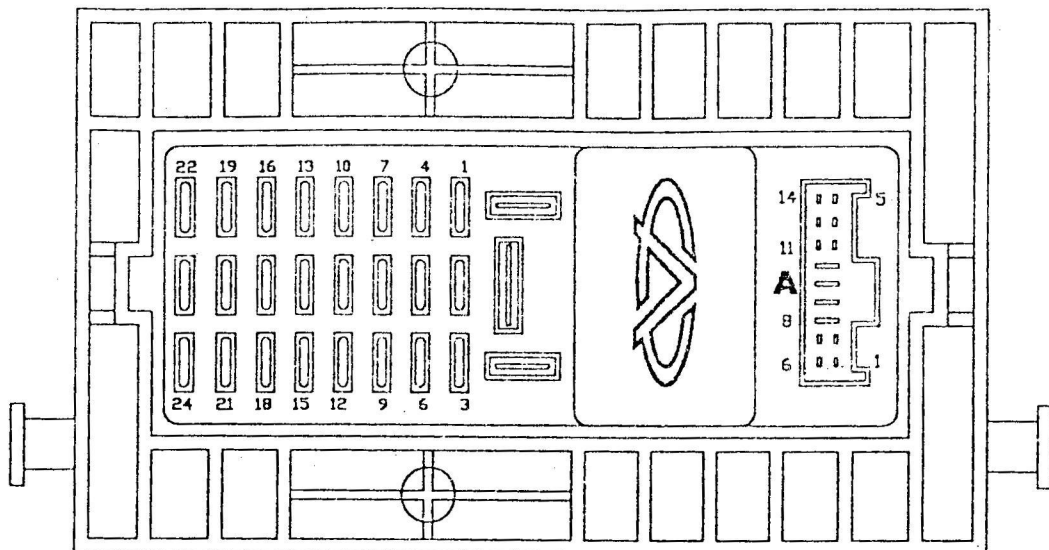


中央电器盒保险丝位置

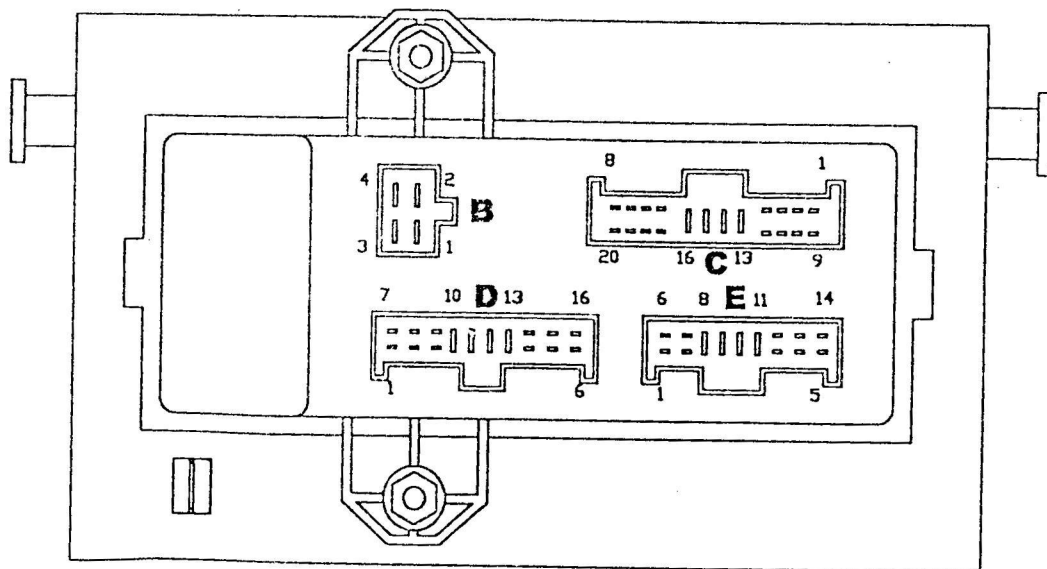
(室内方向盘下)



Central Electrical Box Connector Position



(正面图)



(反面图)

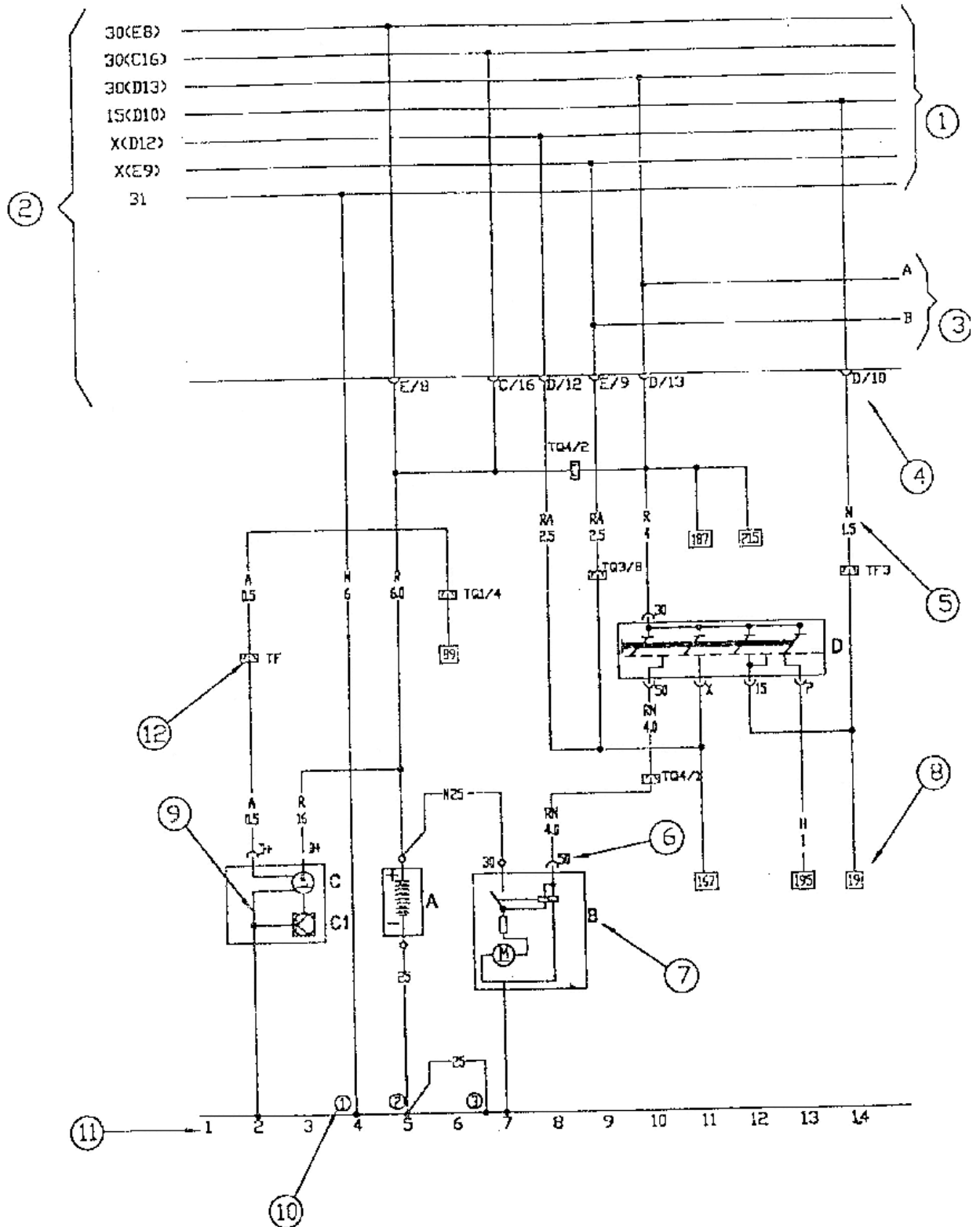
Central Electrical Box Connector, Pin and Function

| Connector | Connector Pin Function | Circuit No. |
|-----------|--|-------------|
| A | 01.Sunroof, Cab Freight Calculator (+15) | — |
| | 02.ECUA/C Signal Input | 138 |
| | 03.—— | — |
| | 04.Luggage Compartment Lamp, Radio, Ceiling Lamp | 247 |
| | 05.—— | — |
| | 06.—— | — |
| | 07.—— | — |
| | 08.—— | — |
| | 09.Rear Window Preheat Switch, Rear Mirror Defrost Switch | 134 |
| | 10.—— | — |
| | 11.Lamp Switch Illumination, ABS Diagnostic Power (+15) | 132 |
| | 12.—— | — |
| | 13.Combination Instrument Power Positive (+30) | 114 |
| | 14. Brake Switch | 192 |
| B | 01.—— | — |
| | 02.—— | — |
| | 03.—— | — |
| | 04.A/C Relay, Blower, Interior Circulate Solenoid Switch | 51 |
| C | 01.Horn Switch | 142 |
| | 02.Fog Lamp Relay (Positive) | 219 |
| | 03.Fog Lamp Switch | 220 |
| | 04.Horn Relay Signal (30) | 140 |
| | 05.Dual Pitch Horn | 141 |
| | 06.Wiper Motor (Positive) | 154 |
| | 07.Panel Indicator, Switch Illumination Light, Light Switch Variable Resistor | 209 83 |
| | 08.Back Light Switch | 152 |
| | 09.—— | — |
| | 10.—— | — |
| | 11.—— | — |
| | 12.Fog Lamp Relay (Positive) | 215 |
| | 13.—— | — |
| | 14.—— | — |
| | 15.Thermo Switch, A/C High Pressure Switch | 47 |
| | 16.Central Electrical Box Power Positive (+30) | 6 |

CIRCUIT__Central Electrical Box Connector, Pin and Function

| Connector | Connector Pin Function | Circuit No. |
|-----------|---|---|
| C | 17. ——— 18. Wiper Intermittent Relay 19. License Plate Lamp 20. Mileage Gauge Sensor | — 149 210 81 |
| D | 01. ——— 02. Cigar Lighter 03. Turn Light Switch, Headlight Adjustment Switch 04. ——— 05. Combination Instrument Positive (+15) 06. Sunroof, Cab Freight Calculator (+30) 07. Ground 08. ——— 09. Rear View Mirror, Lifter Module, Position Select Box (+15) 10. Ignition Switch (+15) 11. Central Locking Controller, Glass Lifter Module (+30) 12. Ignition Switch, Wiper Switch (+15) 13. Central Electrical Box Power Positive (+30) 14. ——— 15. ——— 16. ——— | — 129 175 — 116 — 53 — 272 14 260 8 10 — — 248 |
| E | 01. ——— 02. ——— 03. ——— 04. A/C Compressor Magnetic Clutch 05. ——— 06. ——— 07. ——— 08. Central Electrical Power Positive (+30) 09. Ignition Switch (+15) 10. Lamp Switch 11. ——— 12. Horn Relay 13. ——— 14. ——— | — — — 137 — — — — 5 9 207 — 139 — — |

CIRCUIT MANUAL EXPLANATION



Compiling Explanation

1. Central Electrical Box Main Circuit Board Circuit No.
 - 30: No Fuse, Positive Goes Directly From Battery
 - 15: No Fuse, Positive Goes To Ignition----Start Switch
 - X: No Fuse, Positive Goes To Ignition ----Start Switch, And Being Cut Off During Starting
 - 31: Fictitious Ground, This wire actually exists or does not actually exist.
 - Example: 30(E8) defines these 30 hot wires are directly from battery, and come from central electrical box socket E pin No. 8.
 - 30(C16), 15(D10), X(D12)...are similar as 30 (E8)
2. Central Electrical Box Main Circuit Board Block

This block on main circuit board includes fuse, relay and connection interface.

 3. Wire routes as follows:
 - coming from right side on previous page
 - going to left side on next page
4. Central Electrical Box Main Circuit Board Pins No.

It will be helpful for locating main circuit board circuit, such as E/8 indicates the 8th pin on central electrical box socket E.
5. Wire colors and cross-area, square millimeter
6. Connection Symbol

This symbol is signed on component.
7. Parts or components name (illustrated on left bottom of each page).
8. symbol for wire continuing

Number in square form indicates wire number or appropriate extending wire no.
9. Internal wire

Used for locating internal wire. This wire may actually exist or does not exist.
10. Ground point

Indicated by number in circle, and the point is also indicated on circuit.
11. Circuit number

Used to locating component and interrupted wire connecting point.
12. Multi-hole connector connecting points

Socket terminal numbers are given.

CONTENT

— 2 —

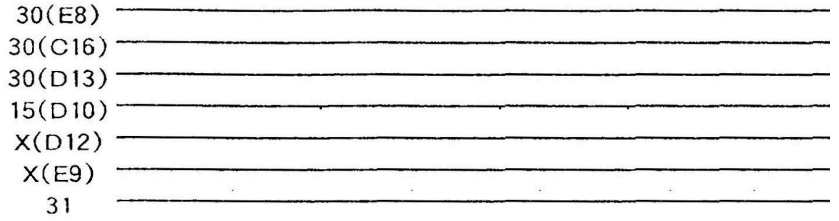
| | |
|--|----|
| —Battery, Alternator, Starter Motor, Ignition Switch | 01 |
| —SPI EI System (MARELLI) | 02 |
| —MPI EI(Electronic Injection) (MARELLI) | 02 |
| —A/C Unit, Control Head, Cooling System | 03 |
| —A/C Switch, Interior Circulate Solenoid, High & Low Pressure Switch | 04 |
| —Oil Pressure Switch, Coolant Temperature Sensor, Manual Brake Indicator Switch, Mileage Gauge | |

| | |
|---|----|
| Sensor | 05 |
| —Radio and 6 Speakers | 06 |
| —IP (Instrument Panel) and MFA | 07 |
| —Front Fog Light, Cigar Lighter, A/C Panel Indicator | 08 |
| —Rear Window Heating System, Dual Pitch Horn, Compressor Magnetic Clutch | 09 |
| —Wiper, Horn Button, Washer | 10 |
| —Headlight, Front Position Light, Light Relay | 11 |
| —Turn Light, Parking Light Switch, Emergency Warning Relay | 12 |
| —Taillight, Side Light, Brake Light | 13 |
| —Light Switch | 14 |
| —Back Light, Rear Fog Light | 15 |
| —Headlight Adjuster | 16 |
| —Front & Rear Interior Light, Luggage Compartment Illumination Light, Sun Visor Light, License Plate Light, Door Touch Switch | 17 |
| —Central Locking | 18 |
| —Power Mirror | 19 |
| —ABS | 20 |
| —Power Glass Lifter Control Unit | 21 |
| —Power Glass Lifter Control Switch | 22 |

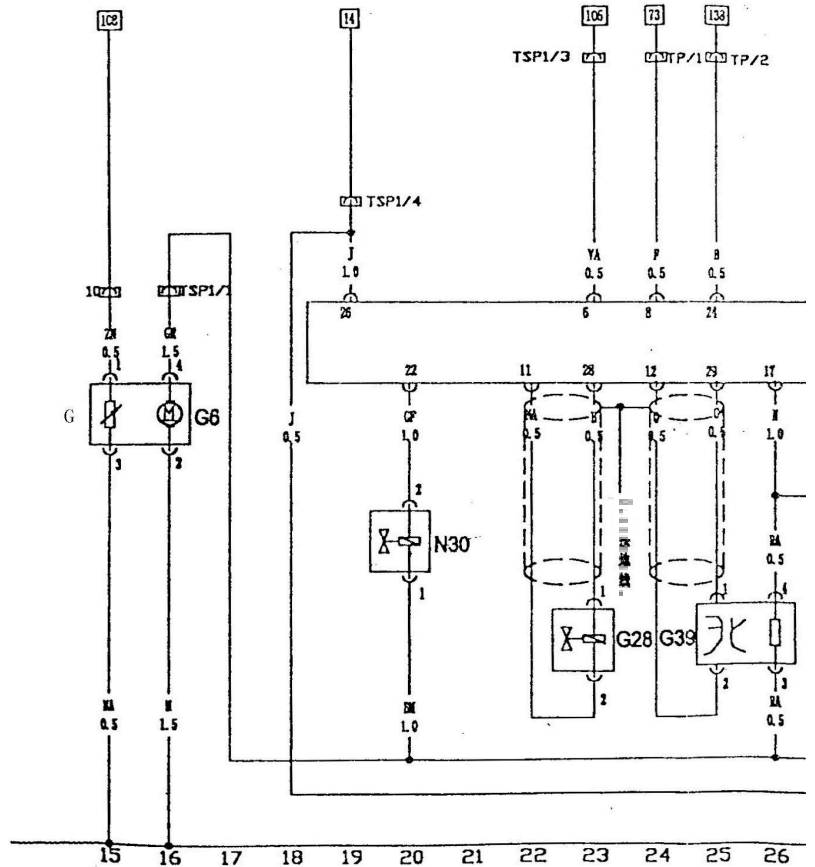
SPI Electronic Injection (Marelli)

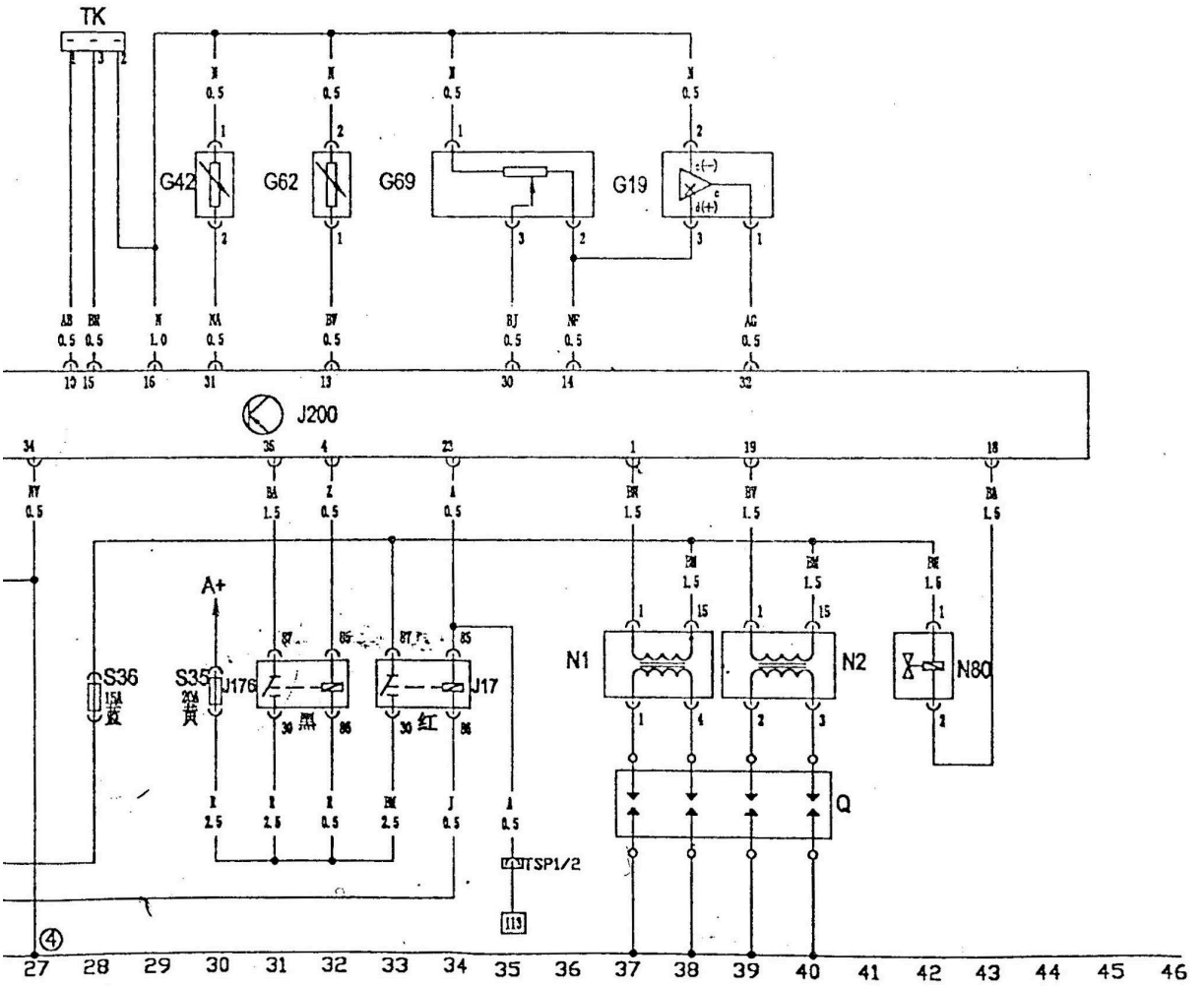
颜色代码 (Marelli)

- B=White
- N=Black
- R=Red
- M=Brow
- n
- V=Gree
- n
- A=Blue
- H=Grey
- Z=Purpl
- e
- G=Yello
- w
- J=Orang
- e = 粉红
- F=Pink



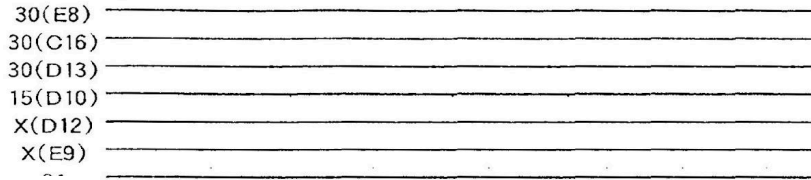
- J200 SPI controller unit
- G42 Air Intake Temperature Sensor
- G62 Water Temperature Sensor
- G69 Throttle Position Sensor
- G19 Air Intake Pressure Sensor
- N30 Active Carbon Canister Solenoid
- G28 Crankshaft Position Sensor
- G39 Oxygen Sensor
- G35 System Fuse
- S36 Oil Pump Fuse
- A+ Battery Positive
- J176 ECU Relay
- J17 Power Relay
- N1 Cylinder 1—4 Ignition Coil
- N2 Cylinder 2--3 Ignition Coil
- Q Spark Plug
- N80 Fuel Injector
- G Fluid Level Sensor
- G6 Fuel Pump
- TK Diagnostic Socket
- (4) Ground On Engine





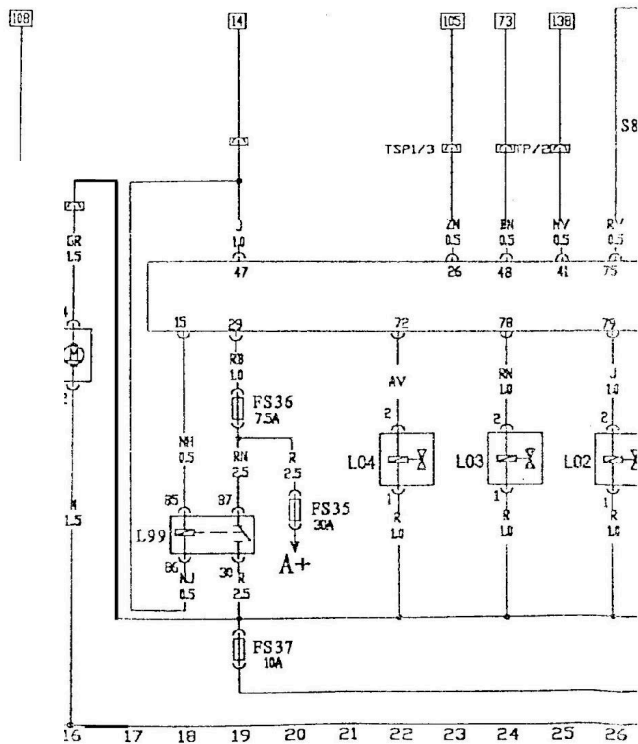
MPI Electronic Injection (Marelli)

MPI 电喷系统 (Marelli)

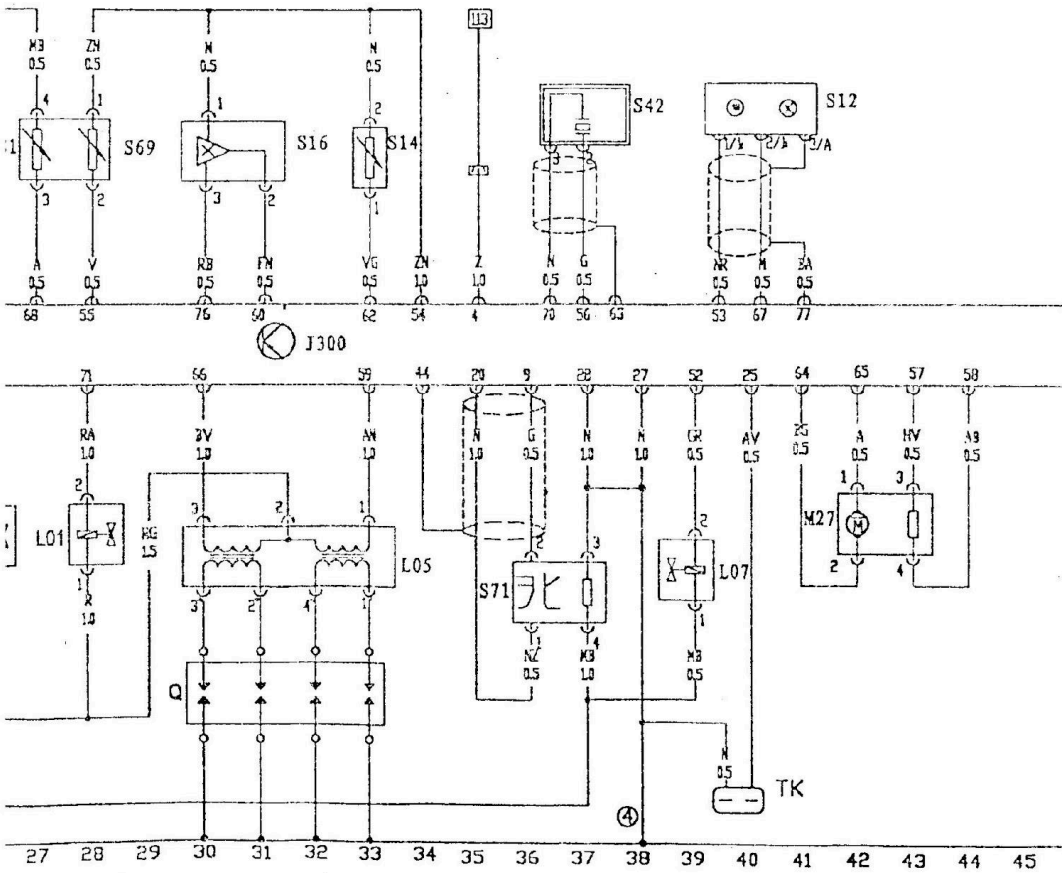
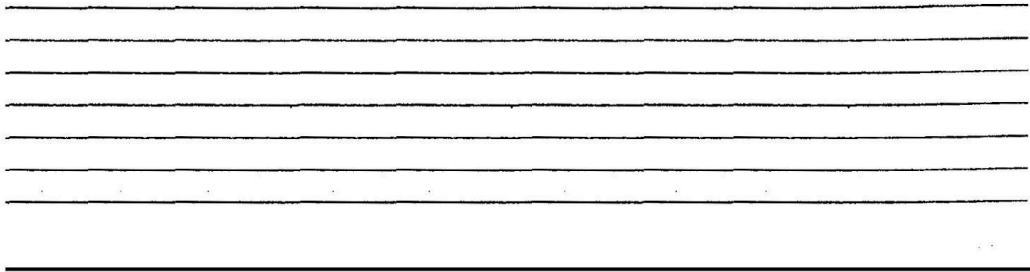


- B=White
- N=Black
- R=Red
- M=Brown
- V=Green
- A=Blue
- H=Grey
- Z=Purple
- G=Yellow
- J=Orang
- 白 = 白色
- 黑 = 黑色
- 黄 = 黄色

- J300 MPI Controller Unit
- S81 Air Intake Pressure Sensor
- G69 Air Intake Temperature Sensor
- JS14 Water Temperature Sensor
- S42 Knock Sensor
- S12 Crankshaft Position Sensor
- L99 Power Relay
- FS 35 System Fuse
- FS 36 ECU Power Fuse
- FS 37 Oxygen Sensor Fuse
- A+ Battery Positive
- L01-04 Fuel Injector
- L05 Ignition Coil
- Q Spark Plug
- S71 Oxygen Sensor
- L07 Carbon Canister Solenoid
- TK Diagnostic Connector
- M27 Idle Step Motor
- G Fuel Level Sensor
- G6 Fuel Pump
- eq \o\ac(0,4) Ground on Engine
- TSPI Connector
- TP Connector
- TD Connector

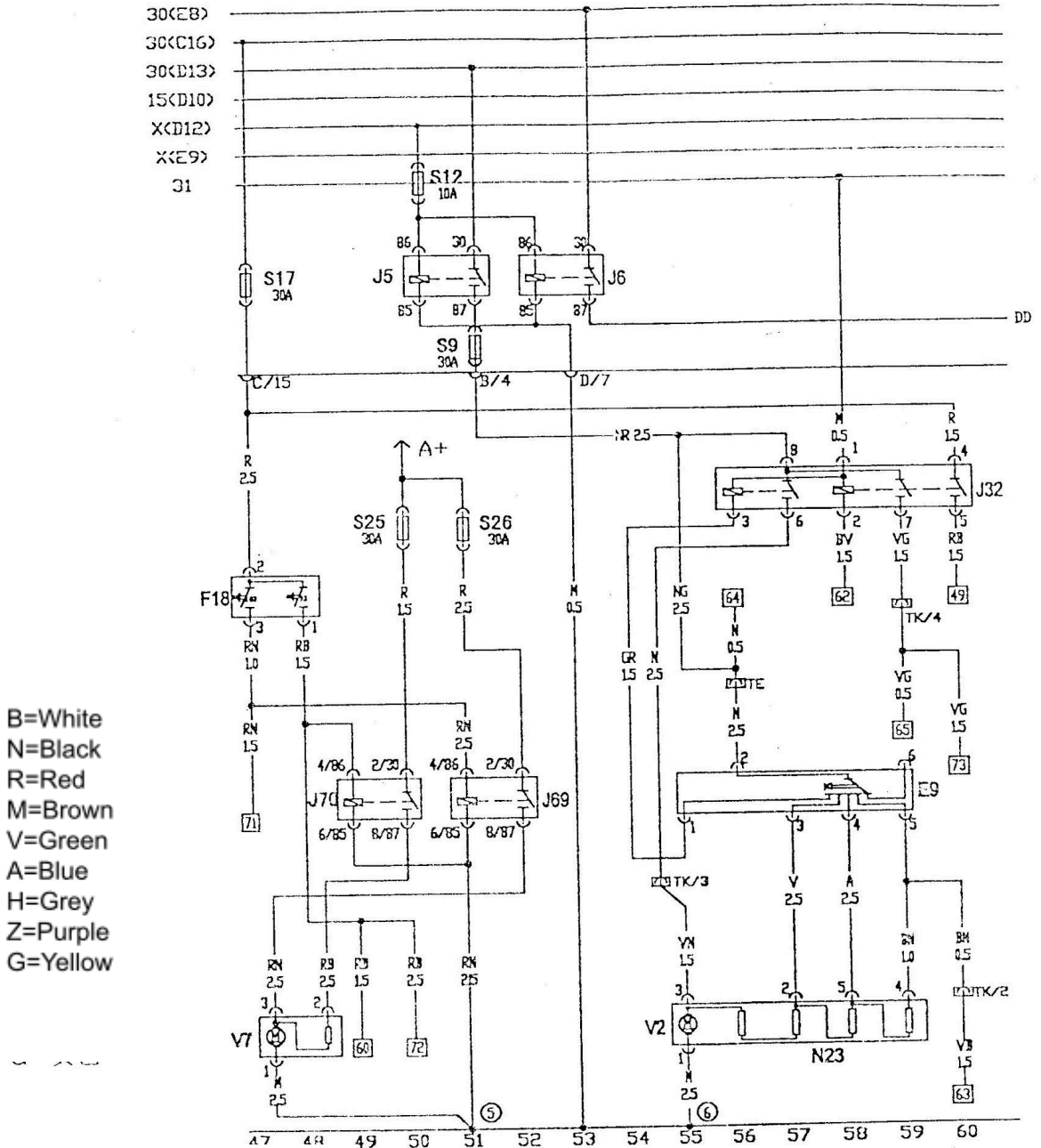


Note: ECU CONNECTOR 1-(1-52 PIN)
 ECU CONNECTOR 2-(53-80 PIN)



A/C Unit, Control Head, Cooling System

空调器、操作机构、冷却系统



- A+ battery positive
- E9 blower switch
- F18 thermo switch
- N23 blower in-line speed regulator resistance
- V2 blower
- V7 fan motor
- J32 A/C relay
- J69 Cooling fan high speed relay
- J70 Cooling fan low speed relay

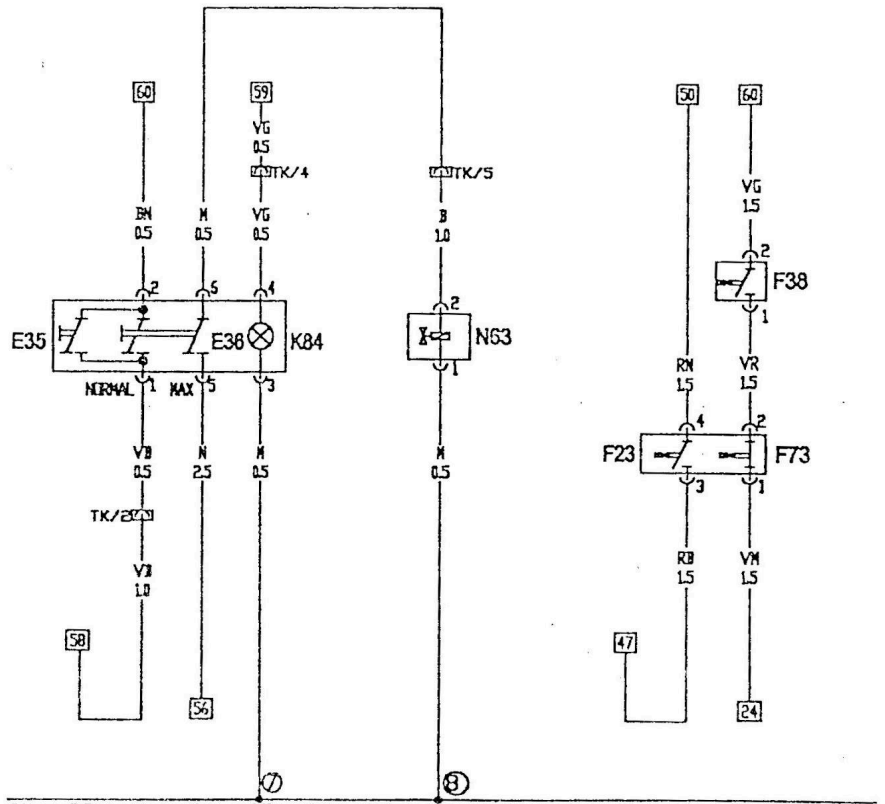
- J5 A/C blower relay (in electrical box)
- J6 Rear Window preheat
- eq \o(,5) ground, in wiring harness in boot I
- eq \o(,6) ground, on ground carrier beside central electrical box

A/C UNIT SWITCH, INTERIOR CIRCULATION SOLENOID, HIGH & LOW PRESSURE SWITCH

空调器开关、内循环电磁阀
高低压开关

- 30(E8) _____
- 30(C16) _____
- 30(D13) _____
- 15(D10) _____
- X(D12) _____
- X(E9) _____
- 31 _____

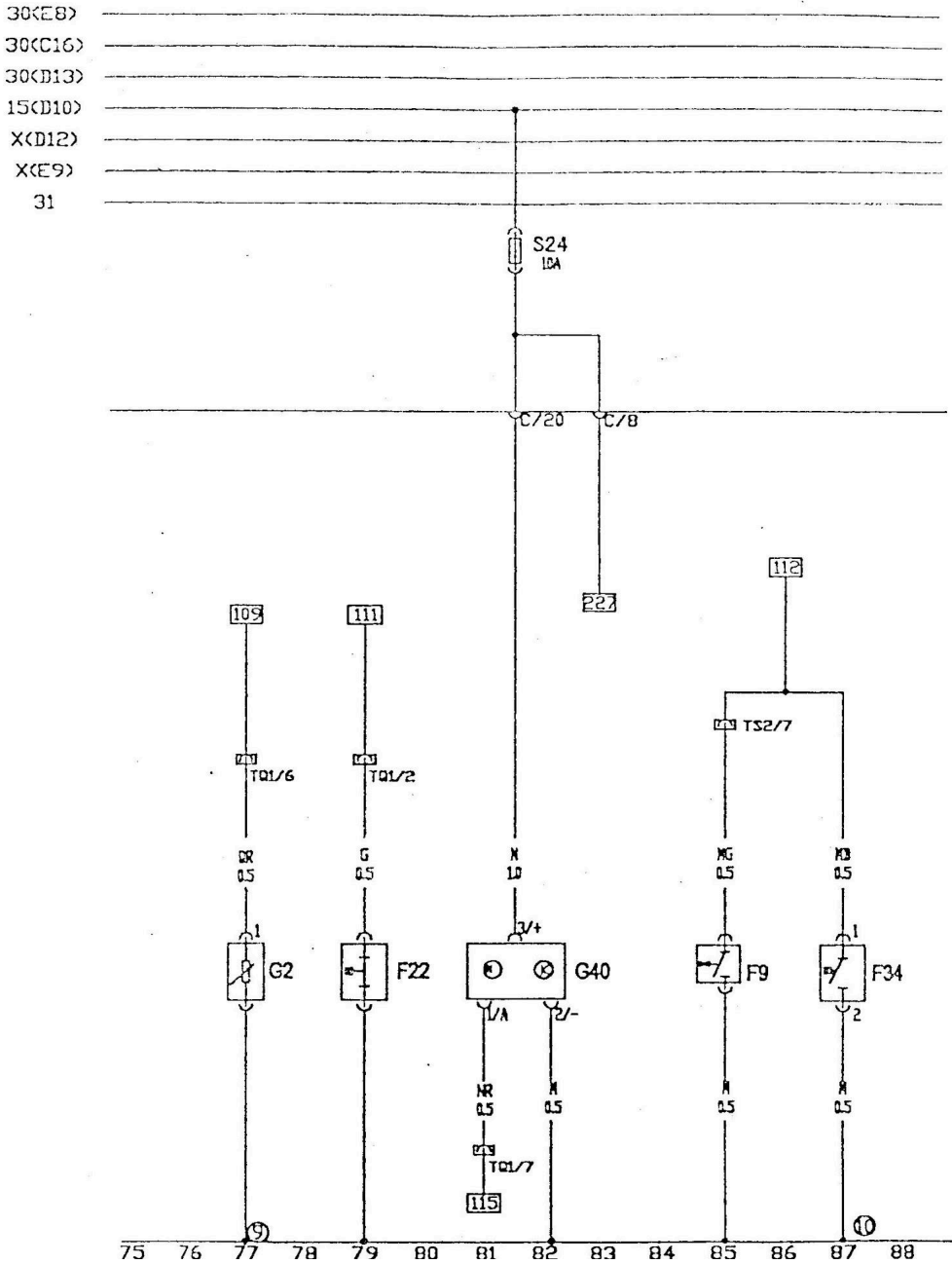
B=White
N=Black
R=Red
M=Brown
V=Green
A=Blue
H=Grey
Z=Purple
G=Yellow



- E35 A/C unit switch
- E36 Interior circulation switch
- K84 A/C operating illumination switch
- ground
- N63 Interior circulation solenoid
- F38 Outside temperature switch
- F23 High pressure switch
- F73 Low pressure switch
- TK 5 holes connector

OIL PRESSURE SWITCH, COOLANT TEMPERATURE SENSOR, MANUAL BRAKE INDICATOR SWITCH, ODOMETER SENSOR

油压开关、冷却液温度传感器、手制动
指示灯开关、里程表传感器

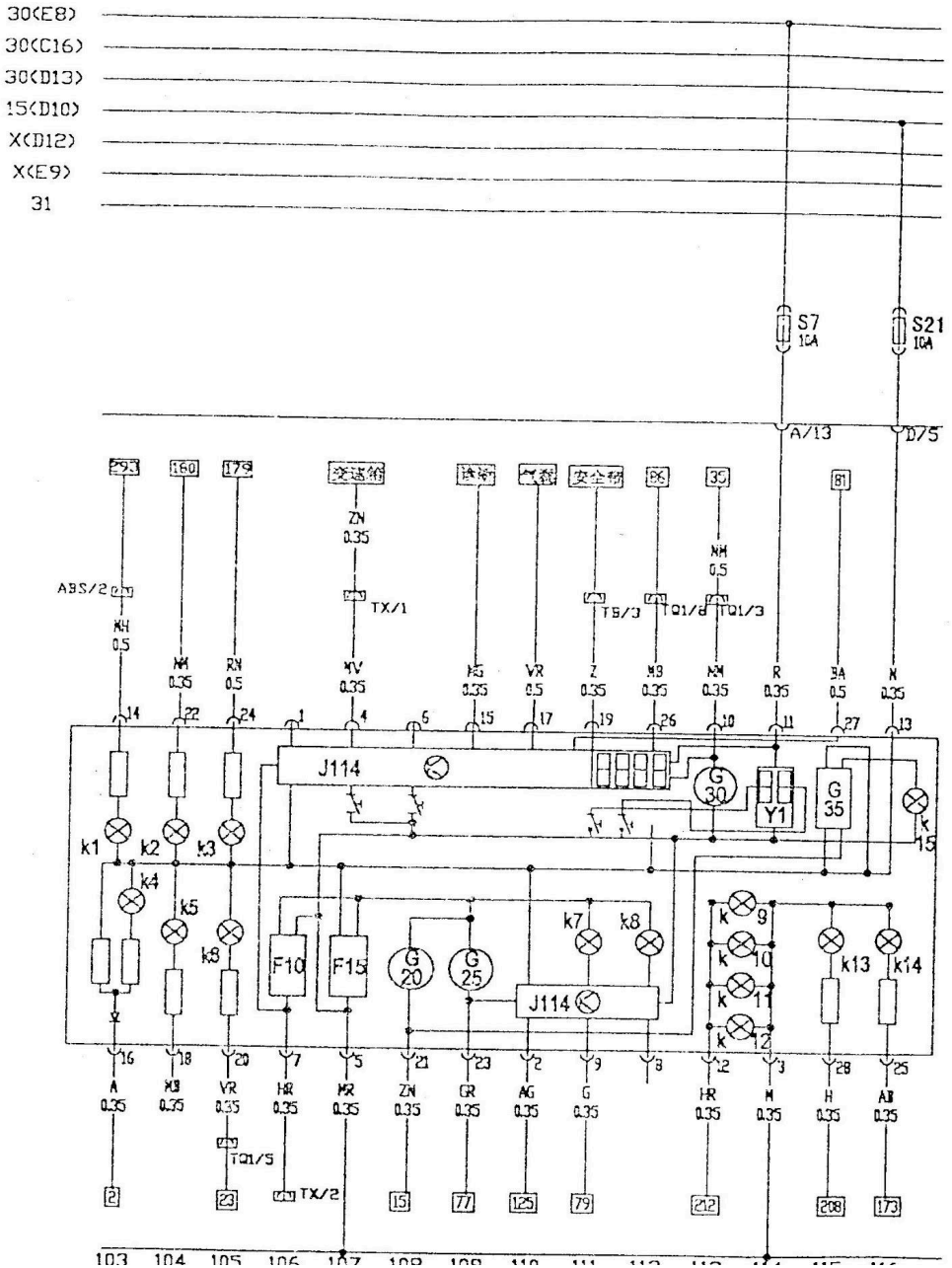


B=WHITE
N=BLACK
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V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLOW

- G2 Coolant temperature sensor eq \lac(\circ,9) ground, on engine cylinder
- F22 Oil pressure switch (low pressure) eq \lac(\circ,10) ground connection, in headlight wiring harness
- F9 Manual brake indicator switch TQ1 10 holes connector
- F34 Brake fluid level warning switch TS2 10 holes match connector
- G40 odometer sensor

INSTRUMENT PANEL AND MFA

仪表板及 MFA

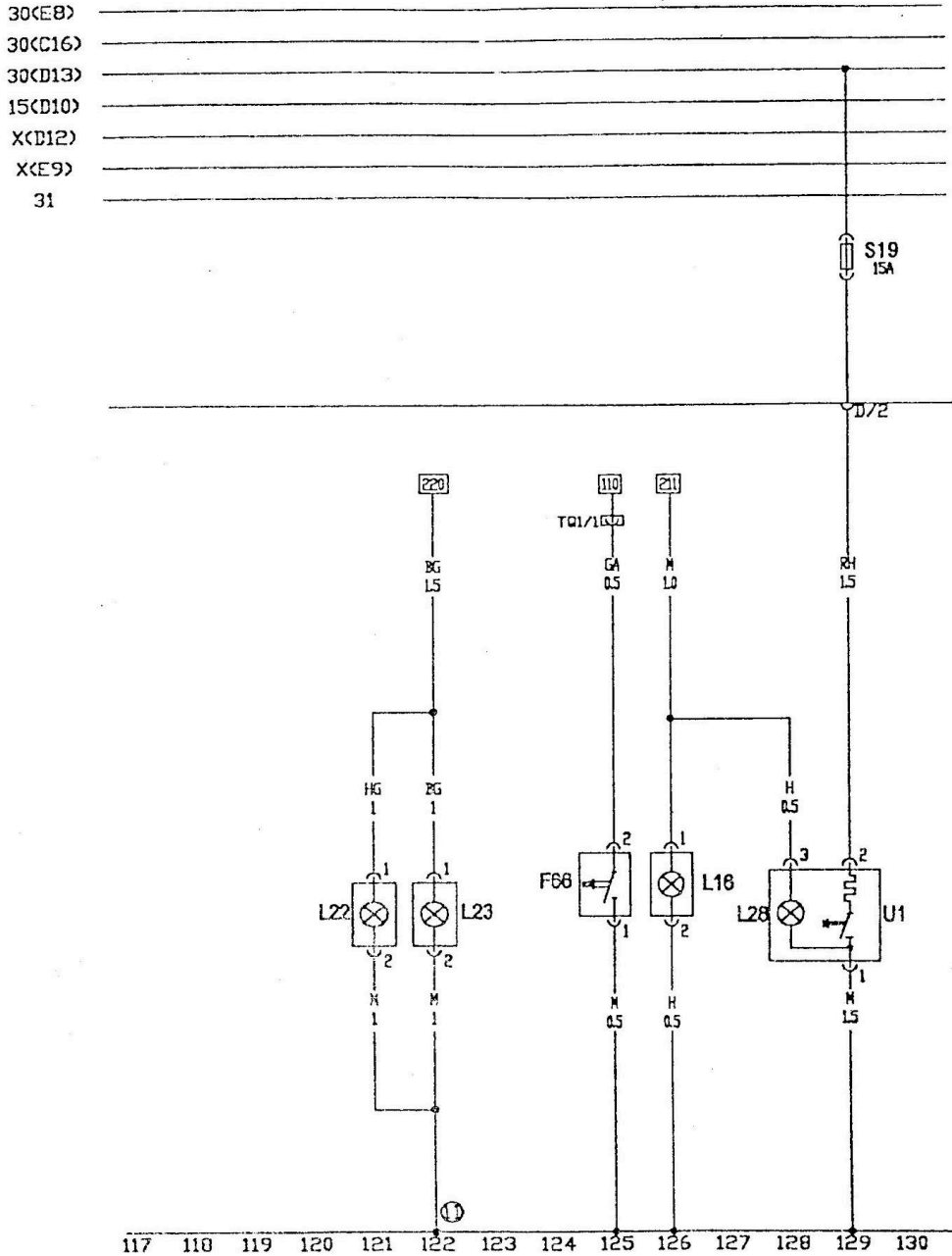


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- | | | |
|--------------------------------------|--|--------------------------|
| F10 multi way converter | K3 right turn indicator | Y1 digital clock |
| F15 voltage stabilizer | K4 engine charging indicator | T1 single hole connector |
| G20 fuel sensor | K5 manual brake warning light | |
| G25 coolant temperature sensor | K6 engine self-check indicator | |
| G30 RPM sensor | K7 oil pressure warning light | |
| G35 preset fluid level compare meter | K8 engine overheat warning light | |
| J114 control unit | K9/K10/K11/K12 instrument panel illumination light | |
| J119 multi function display | K13 low beam headlight, position warning light | |
| K1 ABS warning indicator | K14 high beam warning light | |
| K2 left turn indicator | K15 fuel warning light | |

FRONT FOG LIGHT, CIGAR LIGHTER, A/C PANEL INDICATOR

前雾灯、点烟器、空调面板指示灯



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

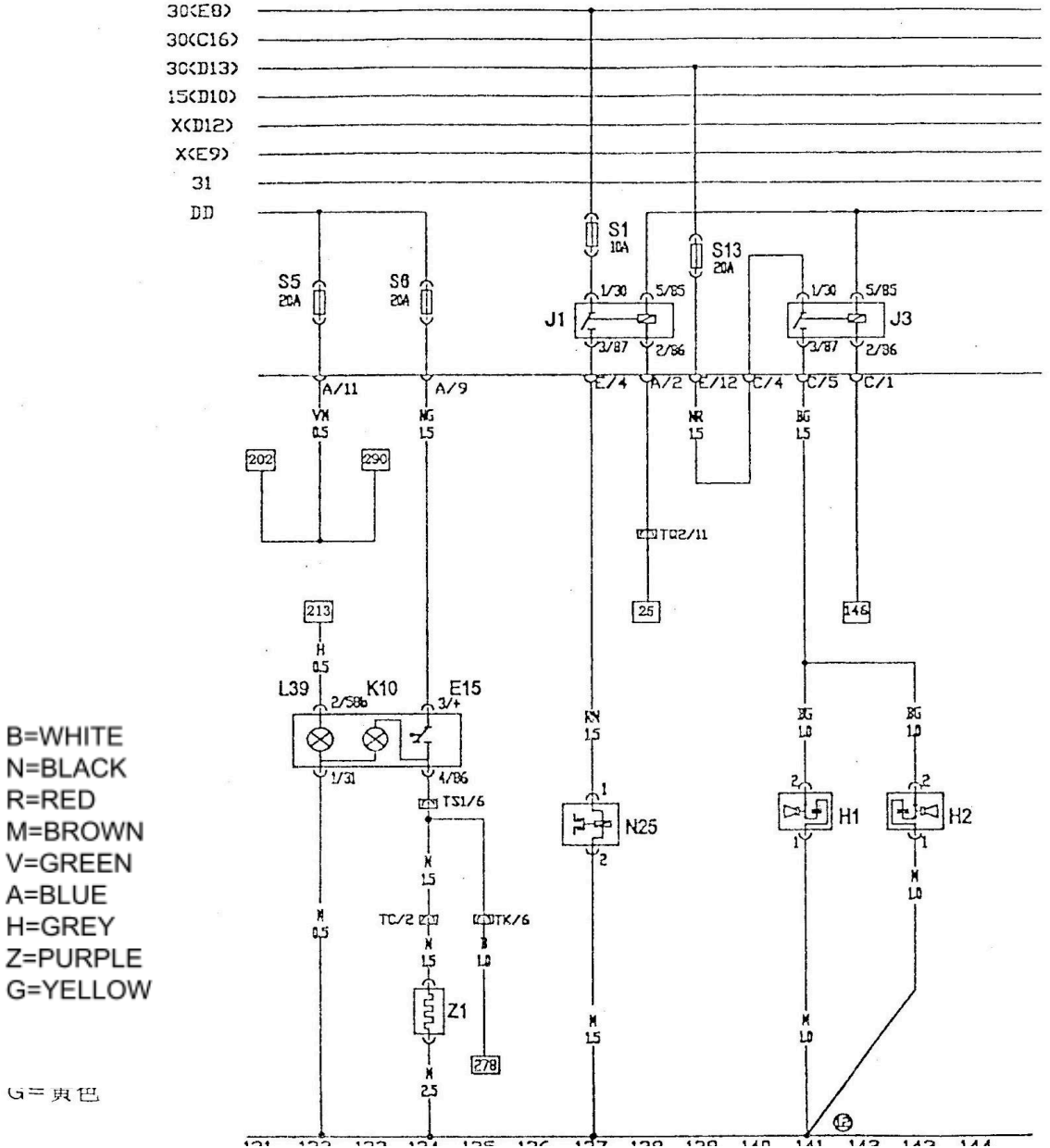
5-1-84

- L16 A/C Control Panel Indicator
- L22 Left Front Fog Light
- L23 Right Front Fog Light
- F66 Coolant Level Switch
- L28 Cigar Lighter Illumination Light
- U1 Cigar Lighter

eq \o\ac(\O,11) Ground, In headlight wiring harness

MAGENETIC CLUTCH

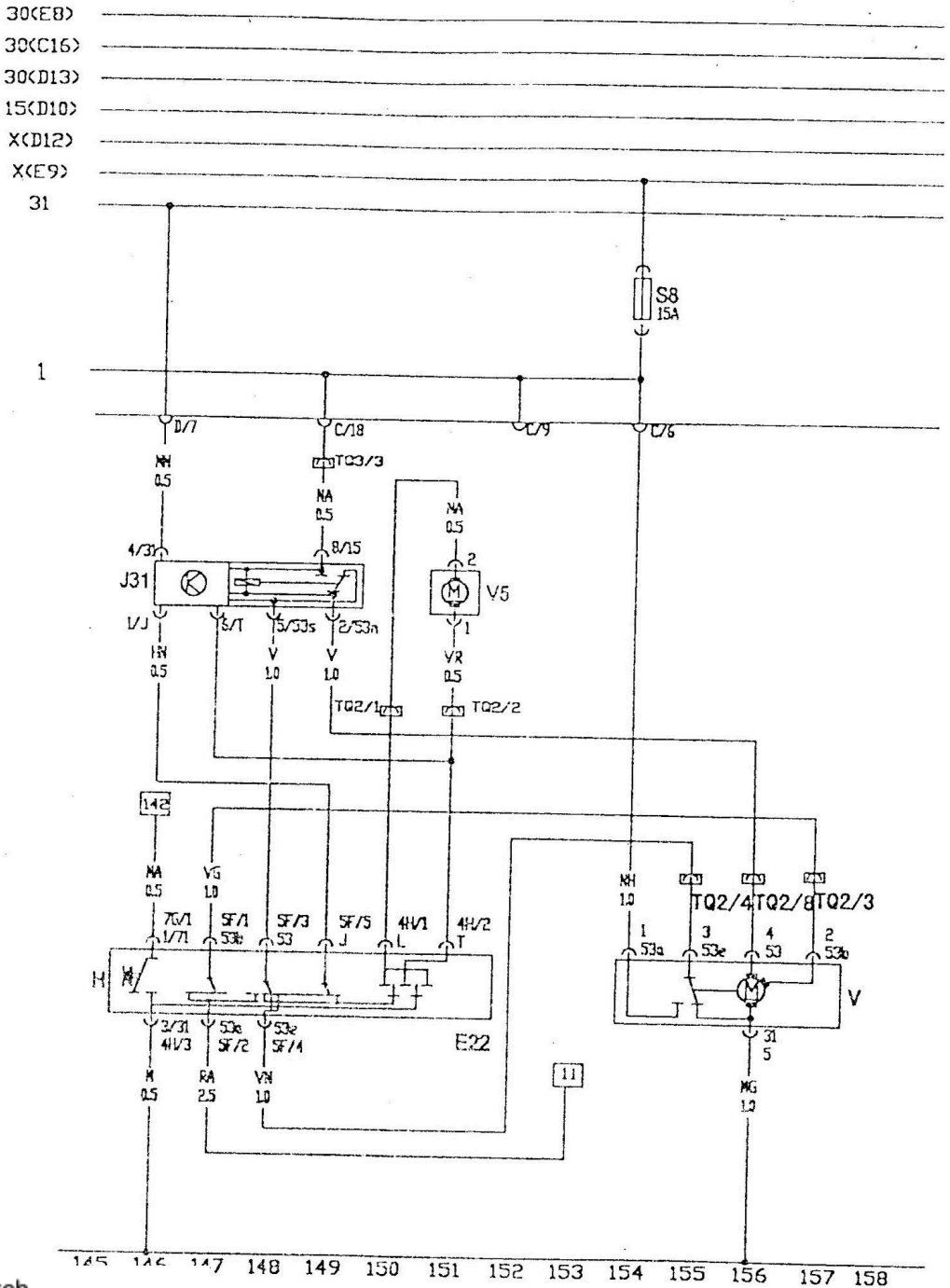
后风窗加热系统、双音喇叭
压缩机电磁离合器



- J1 Idle Up Relay (in electrical box)
- J3 Dual Pitch Horn
- J39 Rear Window Heating Switch Illumination Light
- K10 Rear Window Heating Indicator
- E15 Rear Window Heater Switch
- H1(2) Dual Pitch Horn
- Z1 Rear Window Heater
- eq \o\lac(\circ, 12) Ground point, in dual tone horn wiring harness

WIPER, HORN BUTTON, WASHER

雨刮器、喇叭按钮、洗涤器



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

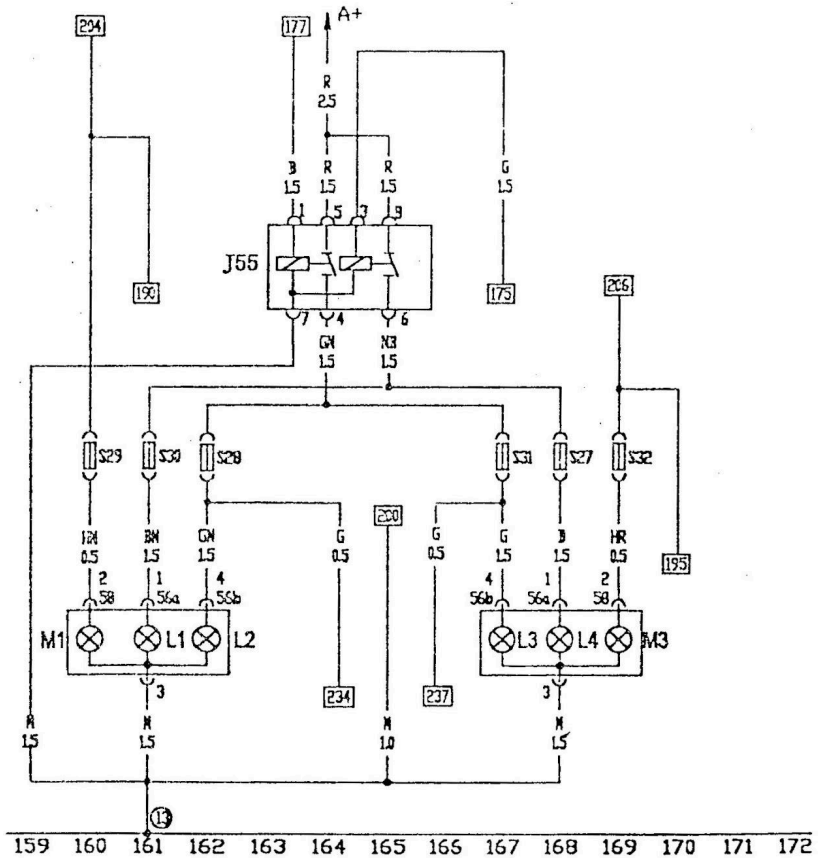
- E22 wiper switch
- H horn button
- J31 intermittent wiper relay
- S5 fuse 15A
- V wiper motor
- V5 washer

HEADLIGHT, FRONT POSITION LIGHT, LIGHT RELAY

前大灯、前位置灯、灯光继电器

- 30(E8) _____
- 30(C16) _____
- 30(D13) _____
- 15(D10) _____
- X(D12) _____
- X(E9) _____
- 31 _____

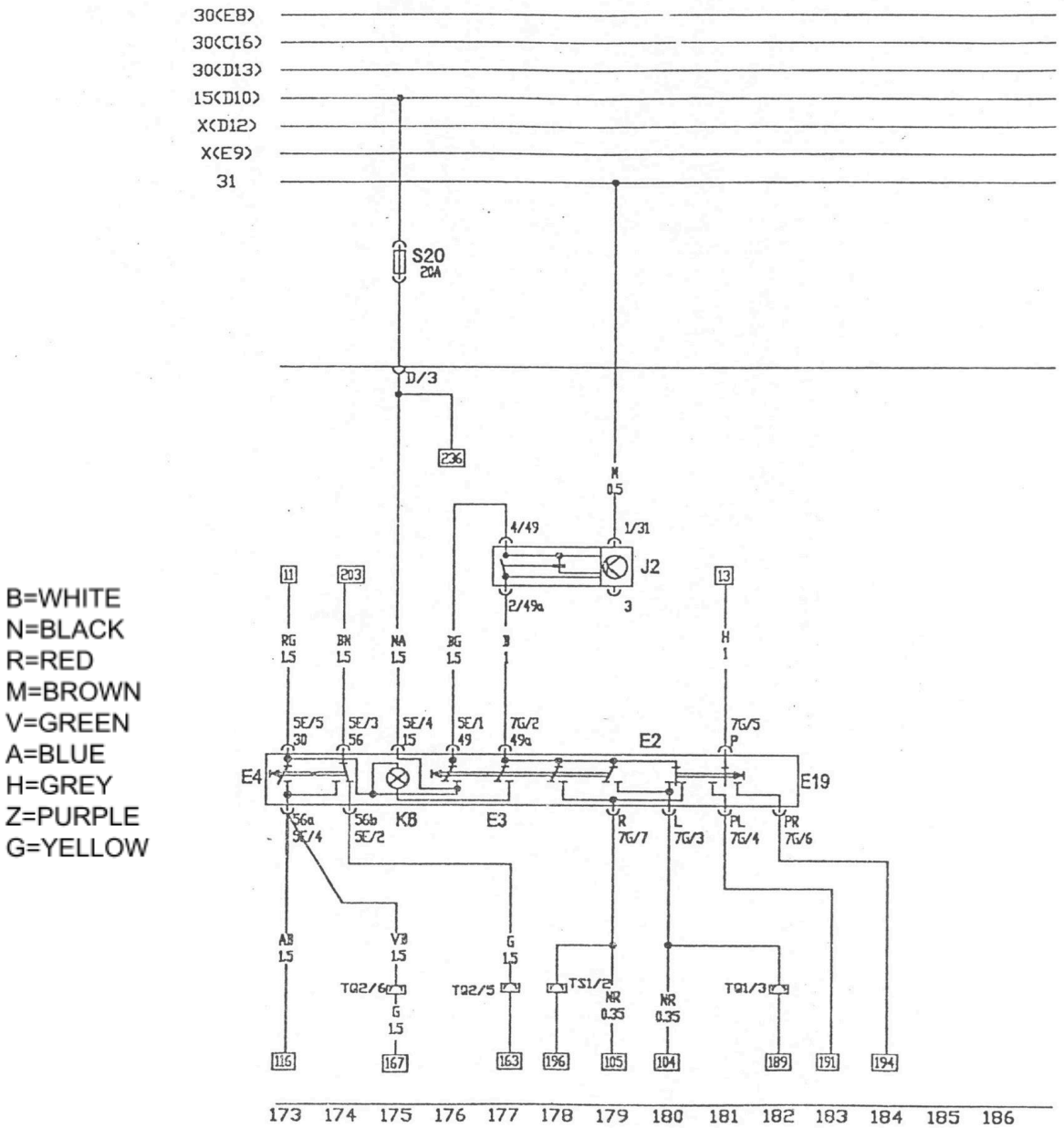
B=WHITE
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 R=RED
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 V=GREEN
 A=BLUE
 H=GREY
 Z=PURPLE
 G=YELLOW



- A+ Battery Positive
- L1 Left High Beam Headlight
- L2 Left Low Beam Headlight
- L3 Right Low Beam Headlight
- L4 Right High Beam Headlight
- M1 Left Position Light
- M3 Right Position Light
- 5 Light Relay
- 7 Right High Beam Headlight Fuse 10A
- 8 Left Low Beam Headlight Fuse 10A
- 9 Left Position Light Fuse 10A
- 10 Left High Beam Headlight Fuse 10A
- 11 Right Low Beam Headlight Fuse
- 12 Right Position Light Fuse 10A
- eq \o\ac(\O,13) Ground, In headlight wiring harness

TURN LIGHT, PARKING LIGHT SWITCH, EMERGENCY WARNING RELAY

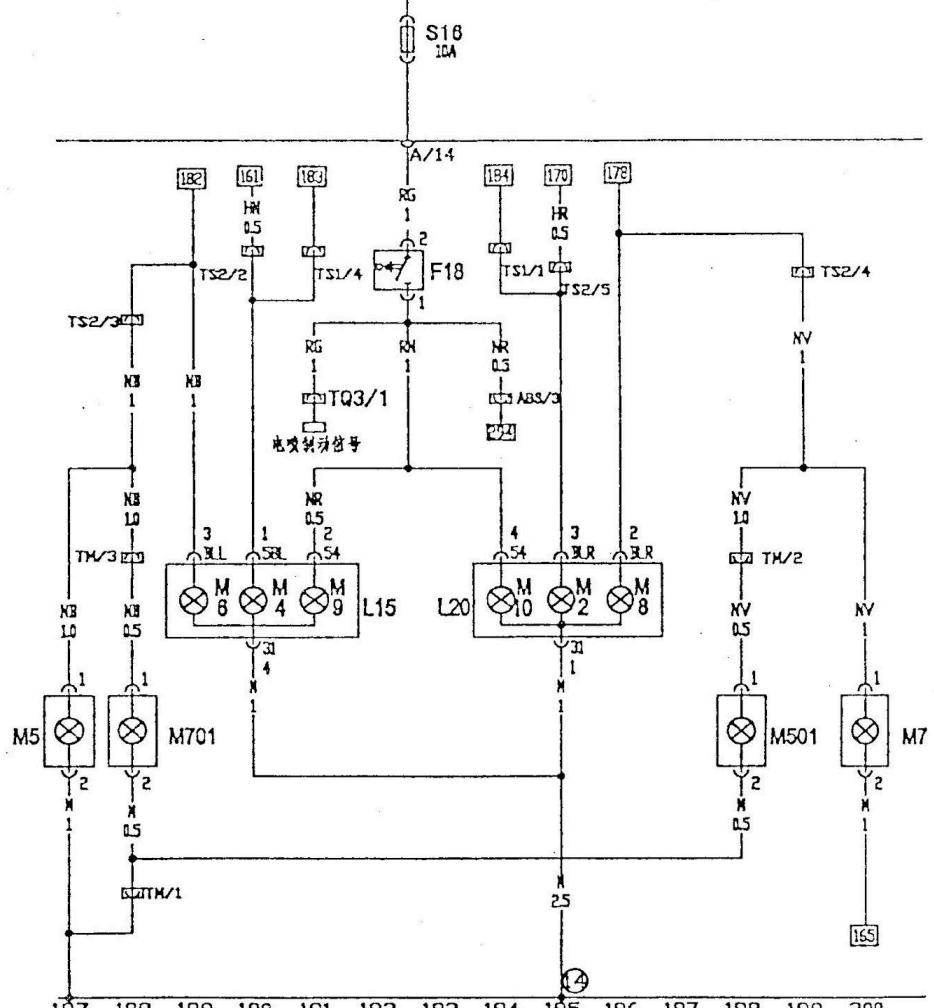
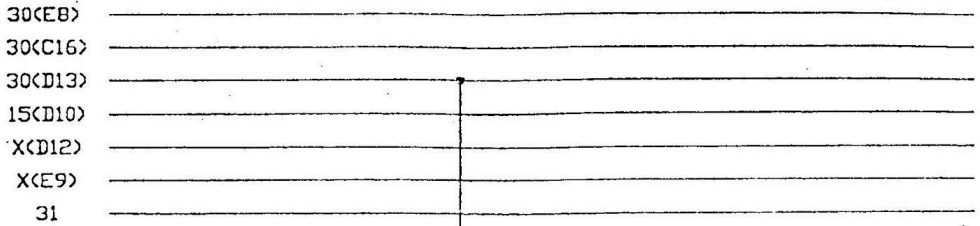
转向灯开关、停车灯开关
遇险警报继电器



- E2 Turn Light Switch
- E3 Emergency Warning Light Switch
- E4 Dimmer and Turn Light Switch
- E19 Parking Light Switch
- J2 Emergency Warning Light Relay
- K6 Emergency Warning Light
- S17 Fuse 10A

TAILLIGHT, SIDELIGHT, BRAKELIGHT

尾灯、侧灯、刹车灯



B=WHITE
 N=BLACK
 R=RED
 M=BROWN
 V=GREEN
 A=BLUE
 H=GREY
 Z=PURPLE
 G=YELLOW

F18 brake light switch light
 L15 left taillight brake light
 L20 right taillight
 M2 rear right position light
 M4 rear left position light
 M6 后左转向灯
 M7 前右转向灯
 M8 后右转向灯

M9 left brake
 M10 right
 M501
 M701 left side

S20 Fuse 10A
 S7 Fuse 10A
 S8 Fuse 10A
 T3 3 holes connector
 T1 single hole connector
 eq volac (14) ground in rear light

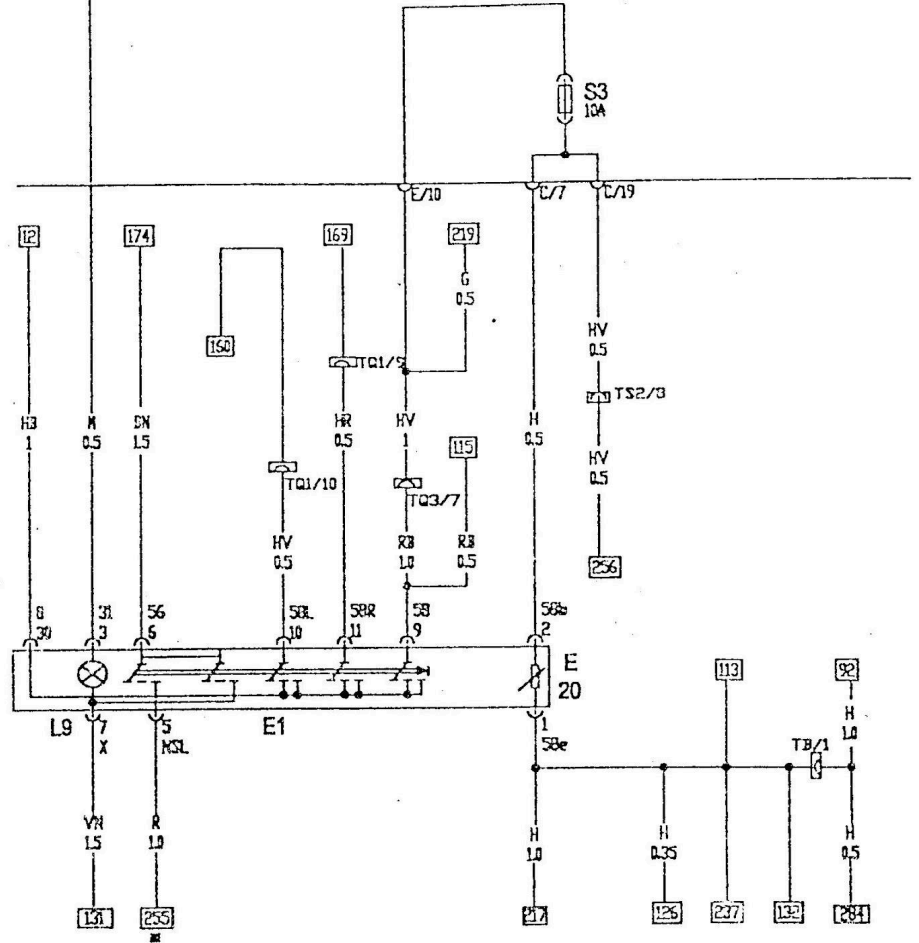
⊕ 在后灯内接地

LIGHT SWITCH

灯开关

30<E8>
 30<C16>
 30<D13>
 15<D10>
 X<D12>
 X<E9>
 31

B=WHITE
 N=BLACK
 R=RED
 M=BROWN
 V=GREEN
 A=BLUE
 H=GREY
 Z=PURPLE
 G=YELLOW



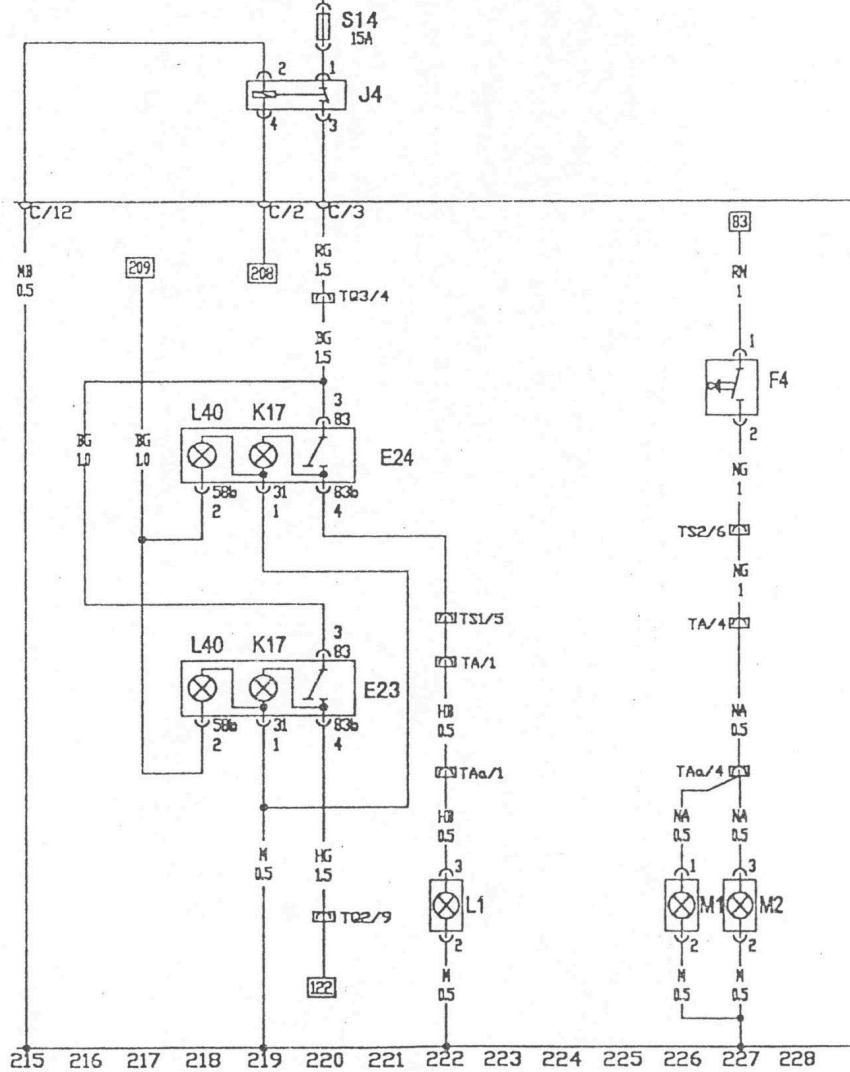
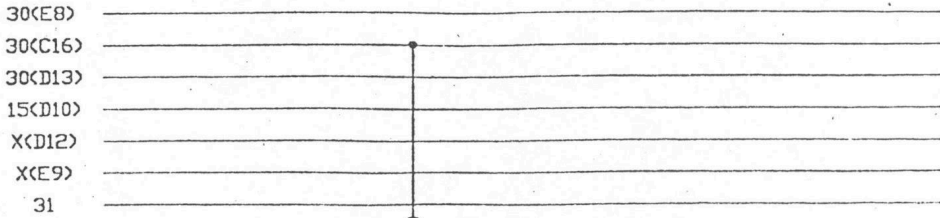
□ — 出口

201 202 203 204 205 206 207 208 209 210 211 212 213 214

- E1 Light Switch
- E20 Panel indicator / instruments illumination light variable resistance
- L9 Panel indicator
- S3 Fuse 10A

BACKLIGHT, REAR FOG LIGHT

倒车灯、后雾灯



B=WHITE
 N=BLACK
 R=RED
 M=BROWN
 V=GREEN
 A=BLUE
 H=GREY
 Z=PURPLE
 G=YELLOW

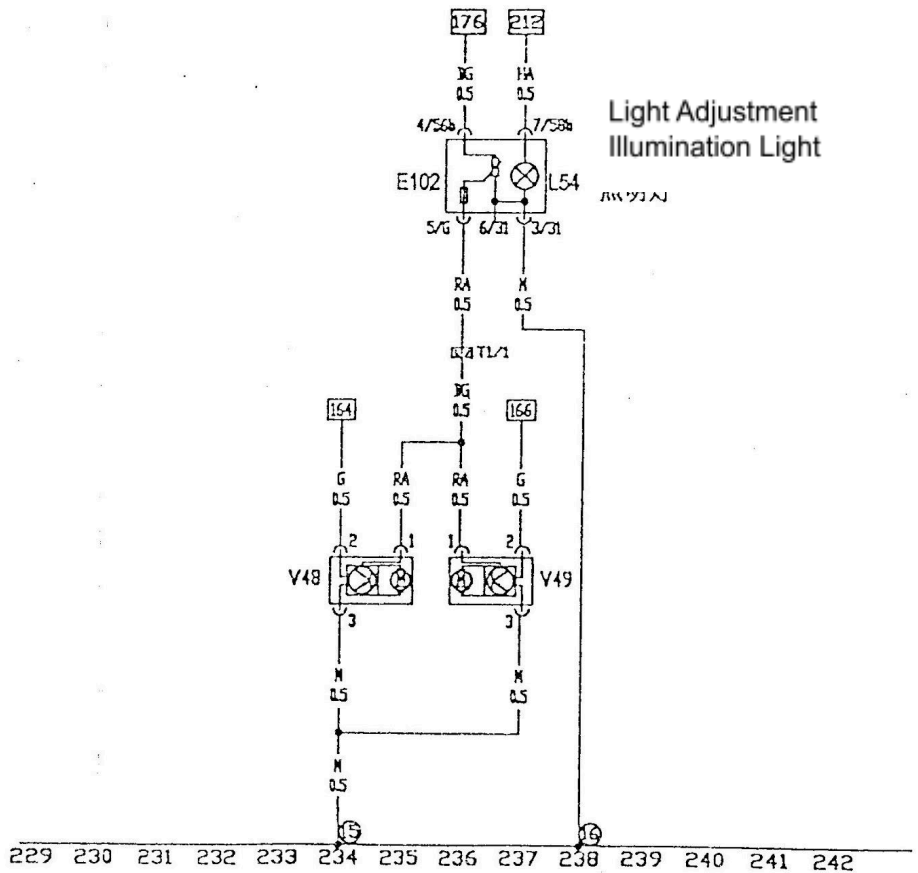
- E23 Front Fog Lamp Switch
- Taillight Moving Parts Wiring
- F4 Back Light Switch
- Connector
- J4 Fog Lamp Relay (in electrical box)
- K17 Rear Fog Lamp Indicator
- Connector
- L1 Rear Fog Lamp
- T1 Single Hole Connector
- L40 Front & Rear Fog Lamp Switch Illumination Light
- M1 Left Back Light
- M2 Right Back Light
- eq \o'ac(○,8) In Rear
- T3 3 Holes
- T3a 3 Holes Connector
- T2 2 Holes
- T1a Single Hole Connector

HEADLIGHT ADJUSTMENT

前大灯调节

- 30(E8) _____
- 30(C16) _____
- 30(D13) _____
- 15(D10) _____
- X(D12) _____
- X(E9) _____
- 31 _____

B=WHITE
 N=BLACK
 R=RED
 M=BROWN
 V=GREEN
 A=BLUE
 H=GREY
 Z=PURPLE
 G=YELLOW

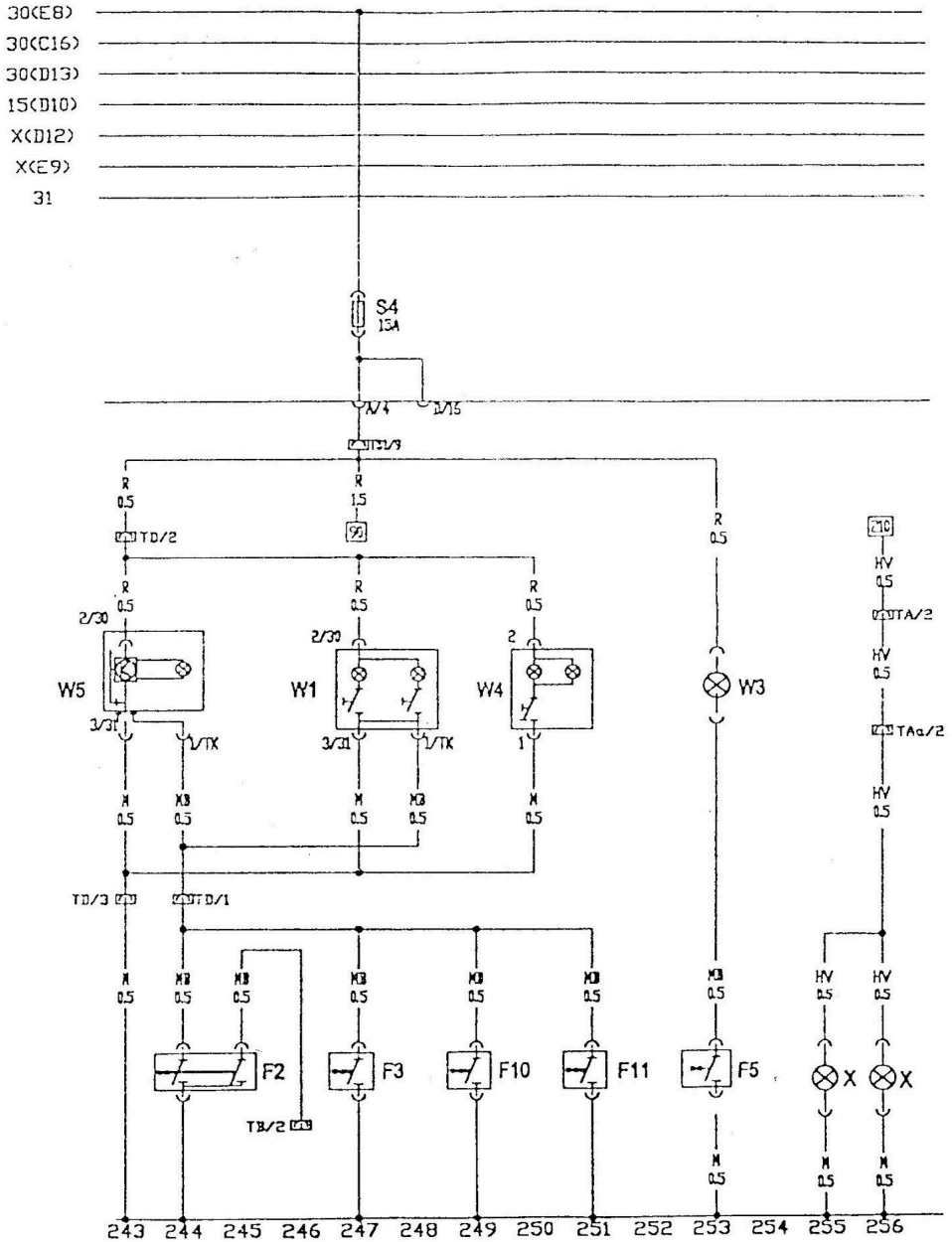


E102 Headlight Height Adjustment Switch
 L54 Light Adjustment Illumination Light
 V48 Left Front Headlight Adjustment Motor
 V49 Right Front Headlight Adjustment Motor

eq \o(16) Ground, Located Beside Central Electrical Box
 eq \o(15) Ground, at headlight
 T1 Single Hole Connector

FRONT AND REAR INTERIOR LIGHT, LUGGAGE COMPARTMENT LIGHT, SUN VISOR LIGHT, LICENSE PLATE LAMP, DOOR TOUCH SWITCH

室内前后灯、行李箱灯、遮阳板灯、牌照灯、门接触开关



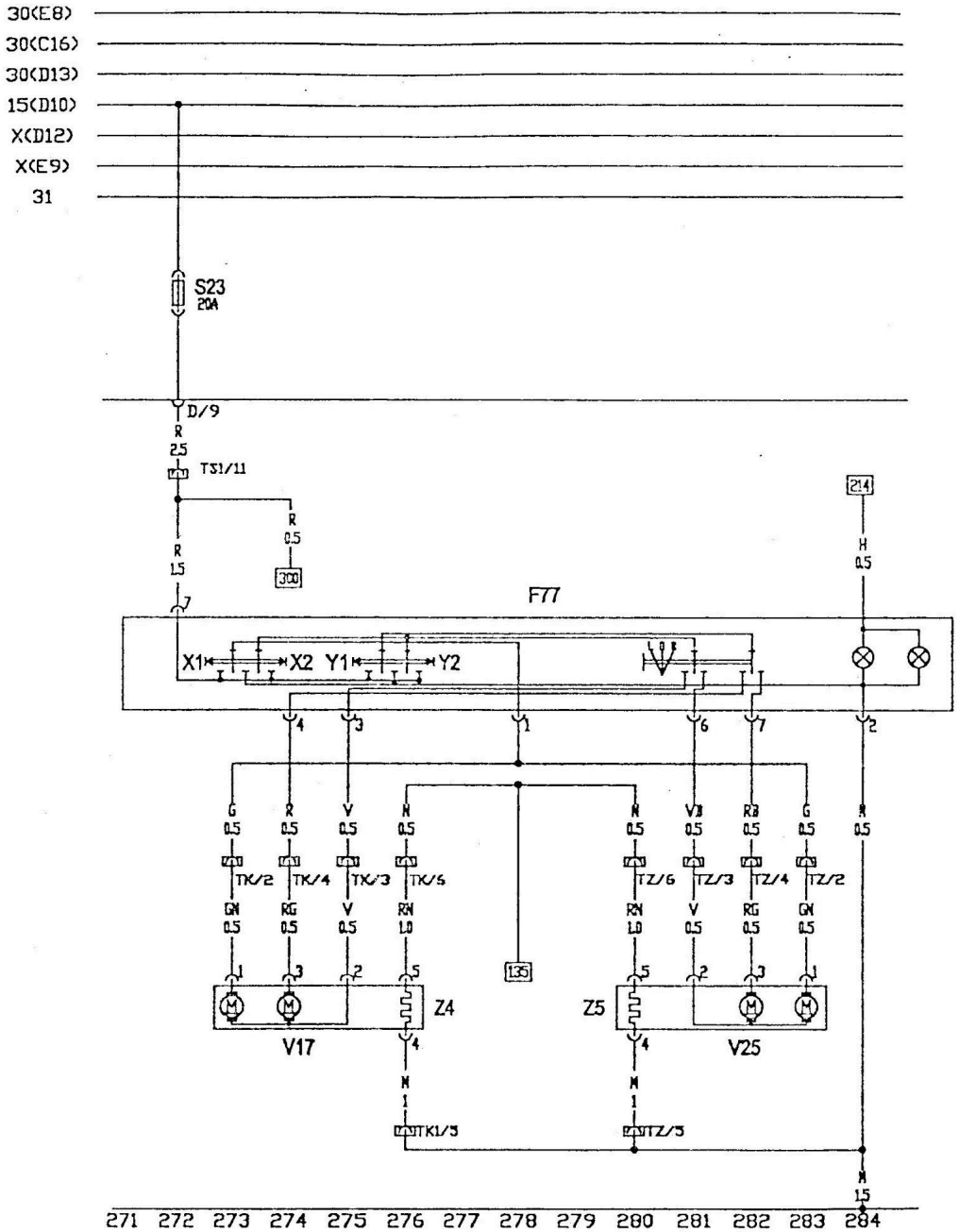
B=WHITE
 N=BLACK
 R=RED
 M=BROWN
 V=GREEN
 A=BLUE
 H=GREY
 Z=PURPLE
 G=YELLOW

F2 Left Front Door Touch Switch
 F3 Right Front Door Touch Switch
 F5 Luggage Compartment Illumination Light Switch
 F10 Left Rear Door Touch Switch
 F11 Right Rear Door Touch Switch
 T8 2 Holes Connector
 TD 4 Holes Connector

TAb 2 Holes Connector, on left side of luggage
 W1 Rear Interior Ceiling Lamp
 W3 Luggage Compartment Light
 W4 Sun Visor Light
 W5 Front Interior Ceiling Lamp With Delay Close
 X License Plate Lamp

POWER MIRROR

电动后视镜



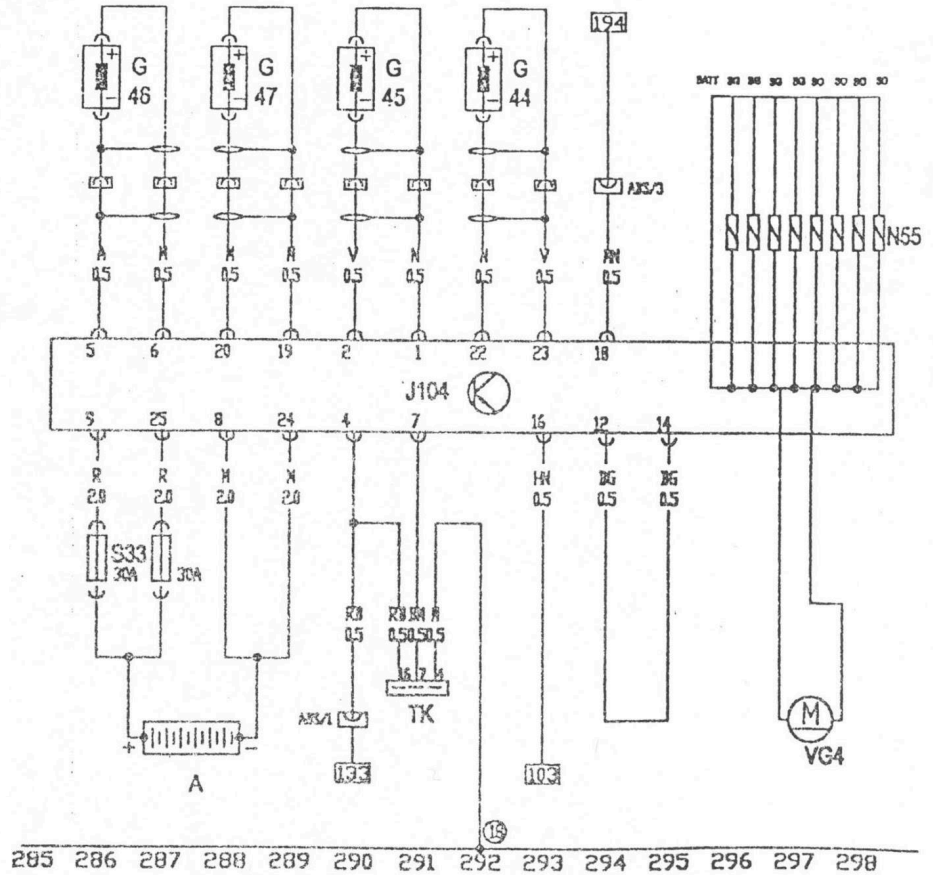
- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREN
- Z=PURPLE
- G=YELLOW

- F77 Mirror Switch
- X1 Left Adjust
- X2 Right Adjust
- Y1 Up Adjust
- Y2 Down Adjust
- V17 Left Mirror Control Motor
- V25 Right Mirror Control Motor
- Z4 Left Mirror Defogger
- Z5 Right Mirror Defogger
- TK1 12 Holes Connector (left A pillar side)
- TK2 12 Holes Connector (right A pillar side)
- TZ 2 Holes Connector (beside central electrical box)

ABS

- 30(E8) _____
- 30(C16) _____
- 30(D13) _____
- 15(D10) _____
- X(D12) _____
- X(E9) _____
- 31 _____

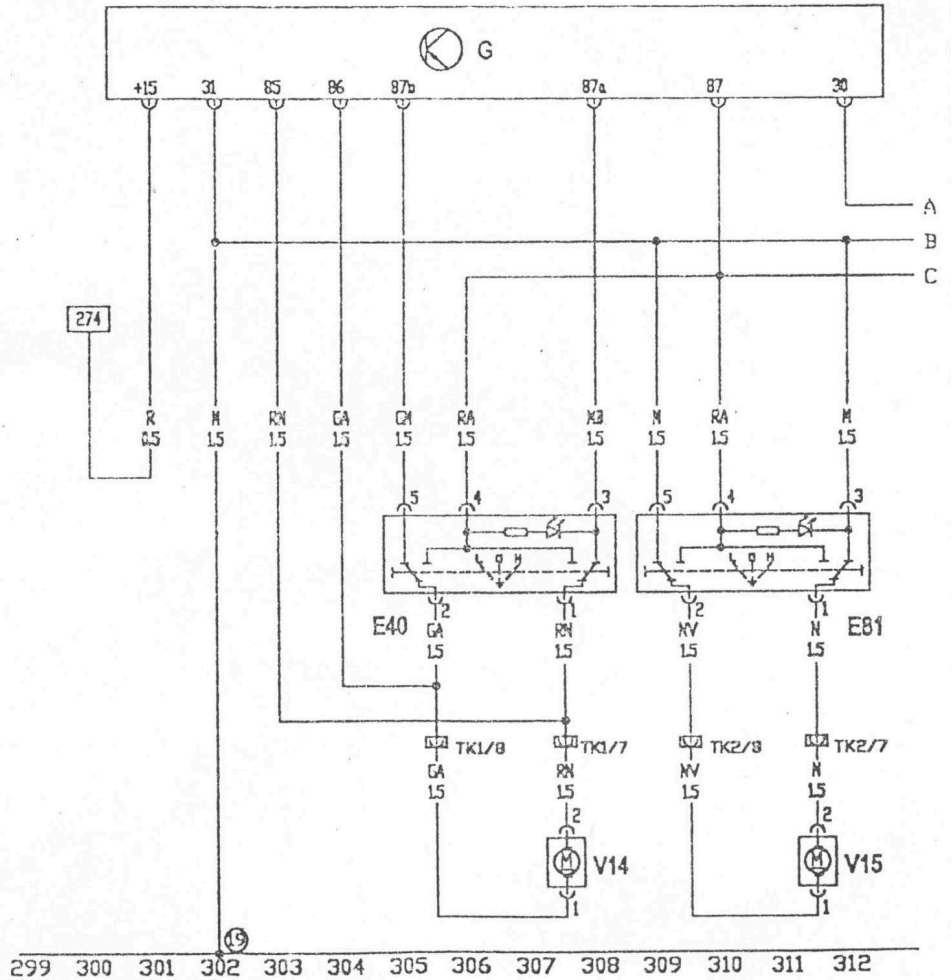
B=WHITE
 N=BLACK
 R=RED
 M=BROWN
 V=GREEN
 A=BLUE
 H=GREY
 Z=PURPLE
 G=YELLOW



POWER GLASS LIFTER CONTROL UNIT

- 30(E8) _____
- 30(C16) _____
- 30(D13) _____
- 15(D10) _____
- X(D12) _____
- X(E9) _____
- 31 _____

- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

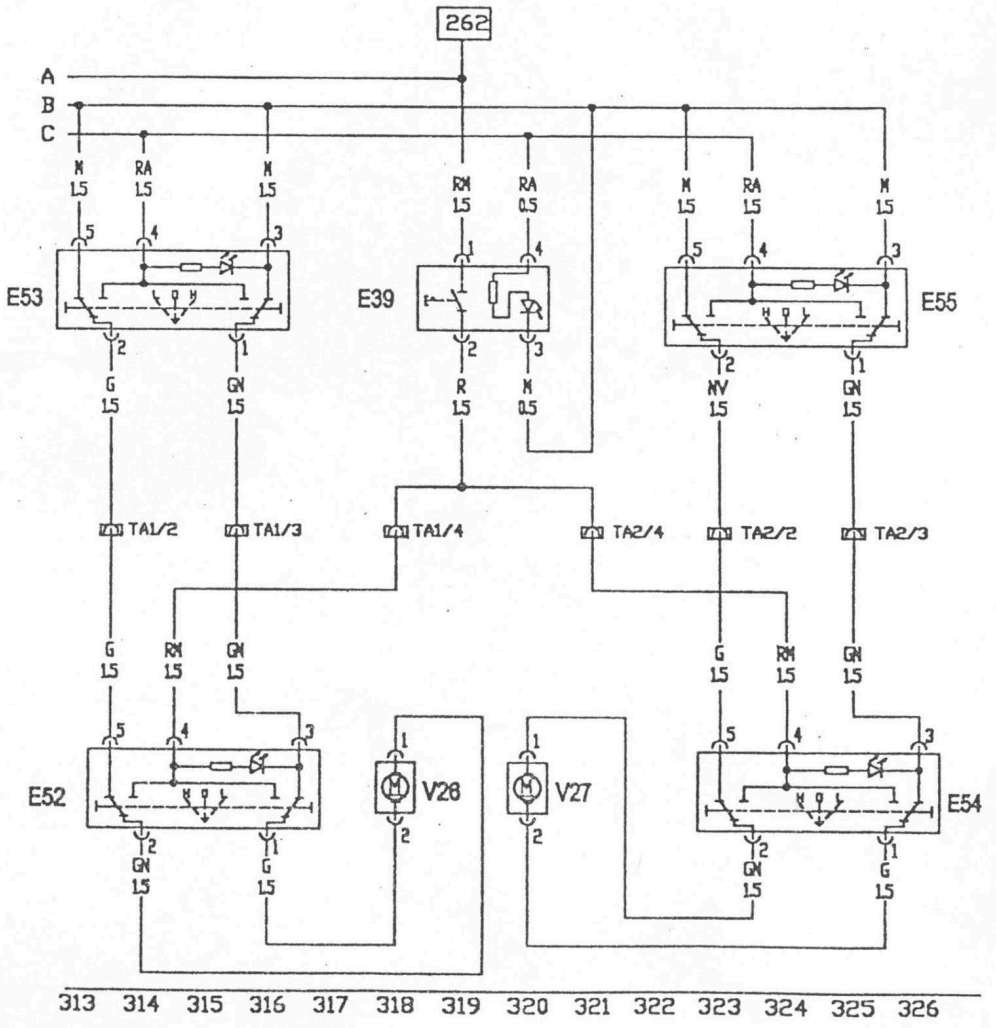


- G Window Glass Lifter Module
- E40 Left Front Window Lifter Switch
- E81 Right Front Window Lifter Switch
- V14 Left Front Window Lifter Motor
- V15 Right Front Window Lifter Motor

- eq 10lac (○, 19) Beside Central Electrical Box
- TK1 12 Holes Connector (Left B Pillar Side)
- TK2 12 Holes Connector (Right B Pillar Side)

POWER GLASS LIFTER CONTROL SWITCH

- 30(E8) _____
 - 30(C16) _____
 - 30(D13) _____
 - 15(D10) _____
 - X(D12) _____
 - X(E9) _____
- 31 _____



- B=白色
- N=黑色
- R=红色
- M=棕色
- V=绿色
- A=蓝色
- H=灰色
- Z=紫色
- G=黄色

- | | | | |
|-----|-------------|-----|---------------|
| E39 | 后部车窗升降器锁定开关 | V26 | 左后车窗升降器电机 |
| E52 | 左后门上车窗升降器开关 | V27 | 右后车窗升降器电机 |
| E54 | 右后门上车窗升降器开关 | TA1 | 四孔插接件(左 B 柱侧) |
| E53 | 左后车窗升降器开关 | TA2 | 四孔插接件(右 B 柱侧) |
| E55 | 右后车窗升降器开关 | | |